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DERWENT-WEEK: 200122
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TITLE: Fuel injection valve, especially for internal combustion engine, has elastically deformable, strip-shaped sealing element joined to sealing body and valve housing by peripheral weld seams

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PATENT-ASSIGNEE: BOSCH GMBH ROBERT[BOSC]

PRIORITY-DATA: 1999DE-1028916 (June 24, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	
PAGES	MAIN-IPC		
JP 2001020823	January 23, 2001	N/A	005
F02M 051/06			
A	December 28, 2000	N/A	004
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DE 19928916 A1			

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP2001020823A	N/A	2000JP-0186487
June 21, 2000		
DE 19928916A1	N/A	1999DE-1028916
June 24, 1999		

INT-CL_(IPC): F02M051/06

ABSTRACTED-PUB-NO: DE 19928916A

BASIC-ABSTRACT: NOVELTY - The valve has a piezoelectric or magnetostrictive actuator (21) in an actuator chamber (20) of a valve housing (2).

The chamber is sealed against fuel and a valve closure body (9) operated by the actuator interacts with a valve seat surface (7) to form a seal seat. The seal has a seal body (13) and an elastically deformable, strip-shaped sealing element (15) joined to the sealing body by a first peripheral weld seam (14) and to the valve housing by a second peripheral weld seam (16).

USE - Especially for an internal combustion engine.

ADVANTAGE - Enables a stable hermetic actuator seal to be achieved, whereby the actuator is protected against the pressure of the fuel and its chemical effect.

DESCRIPTION OF DRAWING(S) - The drawings show a schematic sectional representation of a fuel injection valve and a magnified section.

valve housing 2

valve seat surface 7

valve closure body 9

seal body 13

weld seams 14,16

sealing element 15

actuator chamber 20

actuator 21

CHOSEN-DRAWING: Dwg.1,

TITLE-TERMS:

FUEL INJECTION VALVE INTERNAL COMBUST ENGINE ELASTIC DEFORM STRIP
SHAPE SEAL

ELEMENT JOIN SEAL BODY VALVE HOUSING PERIPHERAL WELD SEAM

DERWENT-CLASS: Q53 X22

EPI-CODES: X22-A02A;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2001-151411

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	16	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and pressur\$	USPA T	2001/12/26 16:57
2	BRS	L2	5	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and (stress\$ or prestress\$)	USPA T	2001/12/26 16:56
3	BRS	L3	2	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and bias\$	USPA T	2001/12/26 16:54
4	BRS	L4	2	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and bias\$	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 16:54
5	BRS	L5	1	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and (stress\$ or prestress\$)	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 16:56
6	BRS	L6	1	piezo\$ adj1 (actuator or stack or laminat\$) and hollow adj1 (housing or cas\$ or body) and pressur\$	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 16:59
7	BRS	L7	246	piezo\$ and housing same (aperture\$ or holes or cutouts or cut adj1 out\$)	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 17:01
8	BRS	L8	13	piezo\$ and housing same (aperture\$ or holes or cutouts or cut adj1 out\$) and housing same (seam or edge)	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 17:02

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	Type	L #	Hits	Search Text	DBs	Time Stamp
9	BRS	L9	83	piezo\$ and (housing or cas\$ or body) adj3 (seam or edge\$)	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 17:18
10	BRS	L10	3	cylindrical adj2 (housing or cas\$ or body) same hollow and (housing or cas\$ or body) adj2 seam\$	EPO; JPO; DERW ENT; IBM TDB	2001/12/26 17:15
11	BRS	L11	29	cylindrical adj2 (housing or cas\$ or body) same hollow and (housing or cas\$ or body) adj2 seam\$	USPA T	2001/12/26 17:16
12	BRS	L12	668	piezo\$ and (housing or cas\$ or body) adj3 (seam or edge\$)	USPA T	2001/12/26 17:21

09/6 39962